

RECEIVED
CENTRAL FAX CENTER

SEP 14 2009

Appl. No.: 10/082,450
 Amdt. dated September 14, 2009
 Reply to PUBS Requirement to Amend Specification

Amendments to the Specification:

Please replace the last line on page 125 and lines 1-13 on page 126 of the Specification with the following:

Example 1. FIGS. 44A-C exemplify the application of the cell rearrangement $X_{(3\ 2\ 1)}$ on stage 2 (44011) of the 16x16 baseline network $[id : (1\ 2\ 3\ 4) : (2\ 3\ 4) : (3\ 4) : id]$ 44010 of FIG. 44A; network 44020 of FIG. 44B is the rearranged network before simplifying the pictorial display of the exchanges. The cell rearrangement relocates a stage-2 cell from the generic address $\text{binary}(b_1b_2b_3)$ to the new address $\text{binary}(b_2b_3b_1)$. In other words, the exchange $X_{(1\ 2\ 3\ 4)}$ (44012) of FIG. 44A immediately before stage 2 is multiplied by $X_{(3\ 2\ 1)}$ (44021) of FIG. 44B from the right-hand side to yield the resulting exchange $X_{(3\ 4)}$ (44031) of FIG. 44C, while the exchange $X_{(2\ 3\ 4)}$ (44013) of FIG. 44A immediately after stage 2 is multiplied by $X_{(1\ 2\ 3)}$ (44022) of FIG. 44B, i.e., the inverse of $X_{(3\ 2\ 1)}$, from the left-hand side to yield the resulting exchange $X_{(4\ 2)(3\ 1)}$ (44032) of FIG. 44C.

The cell rearrangement results the network 44030 having a simplified graphical representation:

$$\begin{aligned}
 &[id : (1\ 2\ 3\ 4)(3\ 2\ 1) : (1\ 2\ 3)(2\ 3\ 4) : (3\ 4) : id] \\
 &= [id : (4\ 3) : (4\ 2)(3\ 1) : (4\ 3) : id]
 \end{aligned}$$